

WHAT IS CLAIMED IS:

1. A wireless telephone instrument for prepaid use with an approving central station to communicate with remote stations through a public switched telephone network, consisting  
5 essentially of:

a housing defining an interior space;

an earphone fixed to said housing for providing voice sounds from audio signals;

a microphone fixed to said housing for providing audio signals representative of  
voice sounds;

10 a transceiver fixed to said housing and connected to said earphone and said microphone for wireless communication with said approving central station and selected ones of said remote stations; and

a control unit fixed to said housing and including a memory for storing data on said wireless telephone instrument, said control unit operating with said transceiver to  
15 sequence communication.

2. A wireless telephone instrument according to claim 1 wherein said data on said wireless telephone instrument includes an identification number.

20 3. A wireless telephone instrument according to claim 1 wherein said transceiver further includes an antenna.

4. A wireless telephone instrument according to claim 2 wherein said antenna includes an elongate shaft, support means for telescopically supporting said shaft and switch  
25 means affixed to said support means and actuatable to energize said instrument.

5. A wireless telephone system for use with wireless telephone instruments individually prepaid for limited use, said system for enabling telecommunication from said wireless telephone instruments to other telephone stations through a dial up network, said system  
30 comprising:

a voice generator for providing vocal cues;

a voice detector for translating voice representations to digital telephone signals;  
a platform for interfacing said wireless telephone instruments to provide vocal  
cues from said voice generator to said wireless telephone instruments and to receive  
voice representations from said wireless telephone instruments for providing digital  
telephone signals;

a memory for storing prepaid balances for said wireless telephone instruments;  
and

control means for controlling said voice generator and said voice detector to cue  
said wireless telephone instruments for the provision of digital telephone signals for  
the verification of a wireless telephone instruments and to dial up a target telephone  
through said network in accordance with said voice representations.

6. A wireless telephone system in accordance with claim 5 wherein said memory  
includes a plurality of cells for storing data respectively on a plurality of said wireless  
instruments, each cell including a plurality of fields for storing an identification number, a  
prepaid balance, a call record, messages, and calling limitations.

7. A wireless telephone system in accordance with claim 5 wherein said memory  
includes a section for storing active call data.

8. A wireless telephone system in accordance with claim 5 wherein said control  
means includes test means for verifying the use of said wireless telephone instruments.

9. A mobile telecommunications system for enabling users to communicate with  
remote terminals via the public telephone network, comprising:

a plurality of mobile user instruments including, means for transmitting digital  
signals representative of identification for an instrument and audio signals  
representative of the user' spoken words, and means for receiving audio signals to  
communicate with said users; and

a central station for interfacing said plurality of user instruments to said public  
telephone network including: a mobile user instrument platform for radio

communication with said user instruments to transmit and receive digital and audio signals; a voice generator means for providing audio signals to said mobile user instrument platform for cuing said users; a voice recognition means to provide digital data from audio signals received from said mobile station users through said mobile user instrument platform; a memory means for information on said mobile user instruments to store, identification data and pre-paid balances for said mobile user instruments; dial-up means for providing dial-up signals to said public telephone network; and a control means coupled to said mobile user instrument platform for sequencing the transmission and receipt of signals in communication with said plurality of mobile user instruments, approving calls from said mobile user instruments and actuating said dial-up means to attain communications between said mobile users instruments and said remoted terminals through said public telephone network.

10. A mobile telecommunications system in accordance with claim 9 wherein said mobile user instruments consist essentially of the elements of claim 1.

11. A mobile telecommunications instrument in accordance with claim 9 where in said memory in said central station further stores:

an instrument code, a call record, a refresh of prepaid value record, a message record, and a limitation of use record.

12. A process for telephonic communication by telephone users with remote telephone terminals through the public telephone network, comprising the steps of:

providing telephonic instruments to said users capable of transmitting pre-recorded digital signals and audio signals representative of a user's spoken words and further capable of receiving audio signals to produce vocal sounds for said user;  
storing consumable pre-paid calling values for said telephone instruments;  
receiving said pre-recorded signals from said telephone instruments as stored by said telephone instruments to identify specific of said instruments;

providing audio interfaces with said telephone instruments to verify proper use of said telephonic instruments and to receive telephone numbers for remote terminals;

with verification of proper use, interfacing said telephone instruments with remote terminals through said public telephone network; and

5       reflecting values in said consumable pre-paid calling values stored for said telephone instruments to account for communications through said public telephone network to said remote terminals.